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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/381,696	09/23/1999	Jan-Eric Callin	1677/00132	4303

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EXAMINER

GREENE, DANIEL LAWSON

ART UNIT	PAPER NUMBER
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3663

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/381,696	Applicant(s) CALLIN ET AL.	
	Examiner Daniel L. Greene Jr.	Art Unit 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-18 is/are pending in the application.
- 4a) Of the above claim(s) 13-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The objection to the disclosure in section 6 of the 1/10/2005 Office action is withdrawn.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. **Claims 1 and 4-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.** The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant's 4/11/2005 amendment to claim 1 introduced the phrase "said upper space is divided into part spaces forming water-filled pools" (underlining added). This phrase is considered new matter in that it is not seen wherein the specification discloses how and in what manner a "space" or "part spaces" can "form" water-filled pools. The specification fails to

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disclose where the water comes from and whether or not the spaces are always filled with water. The claim states that the spaces or part spaces "form" water-filled pools, not that water is added to said spaces after said spaces are formed.

5. **Claims 1 and 4-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.** The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant's 4/11/2005 amendment to claim 1 introduced the phrase "said upper space is divided into part spaces forming water-filled pools" (underlining added), however there is no adequate description or enabling disclosure of what all is meant and encompassed by the phrase "part spaces forming water-filled pools" for the reasons set forth in section 4 above.

6. **Claims 1 and 4-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 1 is vague, indefinite and incomplete in what all is meant by and encompassed by the phrase "part spaces forming water-filled pools" for the reasons set forth in section 4 above, hence the metes and bounds of the claim are undefined.

***Claim Rejections - 35 USC § 102***

**7. Claims 1 and 6 to 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kleimola (U.S. 4,050,983) for the reasons set forth in section 8 of the 1/10/2005 Office Action.**

Regarding page 8 of applicant's remarks received 4/11/2005, Kleimola clearly teaches first and second wall members having essentially identical circular cross-sections wherein it is clearly shown that, except for said cask transfer lock (102), the rest of the structure is indeed circular, which therefore, is considered to read on the entire structure being "essentially" circular. It should be noted that applicant has provided no metes and bounds regarding limitations of what is, or is not, "essentially circular" and therefore the claims do not define over the reference, since the term "essentially" includes shapes that are not completely circular.

Regarding applicant's arguments on page 8 of the remarks received 4/11/2005, that Kleimola does not teach or suggest a continuous sliding form casting, as previously indicated in section 9 of the 1/10/2005 Office action, this limitation is considered to be a product by process limitation, however the patentability of a product does not depend on its method of production. If the product, i.e. the reactor containment, in the product by process claim is the same as the prior art, then the claim is unpatentable, even though the prior art product was made by a different process. **See In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See also MPEP § 2113.**

Regarding applicant's arguments on page 8 of the remarks received 4/11/2005, that Kleimola does not disclose an upper space arranged above the containment and a space arranged to house water filled pools, applicant is directed to, for example, figures 1, 2, 4 and 5, wherein it is shown that item (78) is clearly within an upper space divided into part spaces above said containment, and that items (94), (96) and (100) are also above said containment just as much as applicant's items (14) and (15) are "above" item (19) which is considered to be part of applicant's reactor containment.

**8. Claims 1, 6-8, 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,511,102 to Gluntz.**

Gluntz discloses, in for example figure 1, a nuclear reactor device comprising a reactor containment (18) formed by a first wall member (reads on that part of the wall below the bottom item (52)) defining an inner space; and a reactor vessel (10), housing a reactor core (12) and being located in the inner space; and an upper space located above the reactor containment and defined by a second wall member (reads on that part of the wall above the above the bottom of item (52)), wherein both wall members form a common cylinder with an essentially circular cross section (see, for example, column 1, lines 51-53, which refers to an annular suppression pool surrounding the reactor pressure vessel within the reactor containment vessel, which inherently requires the cross section of the reactor containment vessel to be circular) and wherein said upper space is

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divided into part spaces (52) forming water-filled pools (see for example column 2, lines 39+) wherein it is understood that the product by process explanation in section 7 above applies here as there.

Gluntz further discloses claim 6 in, for example, column 1, lines 47-48.

Gluntz inherently discloses claims 7 and 8 wherein it is understood that in order to configure condenser pool (52) as a collection of sub-pools as set forth in column 2, lines 39+, at least one primary wall element (which includes two primary walls) must extend between two separate attachment portions of said second wall member in order to form "a collection of sub pools." In fact a collection of sub pools reads on more than two sub pools, therefore more than 2 wall elements would be needed in order to provide 3 or more sub-pool elements. **As to limitations which are considered to be inherent in a reference, note the case law In re Ludtke, 169 USPQ 563, In re Swinehart, 169 USPQ 226, In re Fitzgerald, 205 USPQ 594, In re Best et al, 195 USPQ 430, and In re Brown, 173 USPQ 685,688.**

Claims 10 and 11 are clearly disclosed in figure 1 wherein it is understood that the area above the unlabeled arc shaped line directly above the reactor pressure vessel (10) is considered to be the cover device and the secondary wall elements read on the two vertical wall elements adjacent said cover device, and the combination of these elements forms an isolated part space, which is above said cover device.

Claim 12 is disclosed in column 2 lines 39-41 wherein the term "door members" read on those items that interconnect the various sub-pools. Further Gluntz inherently comprises door members arranged to provide a passage between at least two of said part spaces because it is common practice in the nuclear field art to have access to the various compartments within the reactor containment in order to periodically inspect each compartment and the various components that may be located within said compartments. Since compartment (52) has heat exchanger (54) and collection chamber (64) within it, there must inherently be at least one access door of some type to provide access for maintenance personnel to perform maintenance on said items. Additionally since the primary purpose of the reactor containment vessel is to prevent leakage of radioactive material into the environment, it is also common knowledge to minimize the number of penetrations, i.e. access ports/doors/channels of said reactor containment vessel, therefore access to sub-compartments within said reactor containment vessel are typically located and provided within said reactor containment vessel. **As to limitations which are considered to be inherent in a reference, note the case law In re Ludtke, 169 USPQ 563, In re Swinehart, 169 USPQ 226, In re Fitzgerald, 205 USPQ 594, In re Best et al, 195 USPQ 430, and In re Brown, 173 USPQ 685,688.**



***Claim Rejections - 35 USC § 103***

**9. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Kleimola as applied to claims 1, and 6 to 12, or Gluntz as applied to claims 1, 6-8, 10-12 in view of Harstead (U.S. 4,175,005).**

The primary references disclose the claimed invention as explained above except for citing that pre-stressed tendons are used in the method of concrete construction.

The secondary reference, Harstead, discloses the use of pre-stressed tendons (items 8) for use in nuclear reactor containment construction, and affords a number of significant design and economic advantages as disclosed in for example, Column 3, lines 8+, and Column 4, lines 1-53.

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to include the use of pre-stressed tendons, also known in the art as reinforcement members, also known in the art as tightening members, in the construction of either Kleimola or Gluntz for the benefits thereof, as taught to be old and advantageous by Harstead.

***Response to Arguments***

10. Applicant's arguments with respect to claims 3-5 (see pages 8 and 9 of the remarks received 4/11/2005) have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

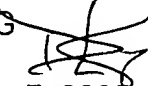
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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel L. Greene Jr. whose telephone number is (571) 272-6876. The examiner can normally be reached on Mon-Fri 8:30am - 5pm.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can normally be reached, Mon-Fri 6:30am -4:00pm, at telephone number (571) 272-6878. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DIG   
July 7, 2005

**HARVEY BEHREND**  
**PRIMARY EXAMINER**  
